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10/726,611

12/04/2003

Hideo Okoshi

8048-1034

5769

466

7590

05/31/2006

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EXAMINER

JOYCE, WILLIAM C

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,611

Applicant(s)

OKOSHI, HIDEO

Examiner

William C. Joyce

Art Unit

3682

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This is the First Office Action in response to the above identified patent application filed on December 4, 2003.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 2 of claim 1, the addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Ex parte Copenhaver, 109 USPQ 118 (Bd. App. 1955).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by AI (WO 03/064891).

Ai Illustrates in Figures 1-11 a rolling friction transmission apparatus of a wedge roller type comprising: two parallel shafts which are mutually eccentric and are rotatably supported by a fixed part (Fig 8); a rolling-surface-shaft which has a cylindrical rolling surface at an outer surface thereof and is disposed at one of said two parallel shafts; a ring which has a cylindrical rolling surface at an inner surface thereof and is disposed at

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the other of said two parallel shafts; and three transmission rollers which have cylindrical transmission surfaces at outer surfaces thereof respectively and are placed in contact with the rolling surfaces of said rolling-surface-shaft and said ring, in an unequally-spaced space generated between the rolling surfaces of said rolling-surface-shaft and said ring and with such a gap that said three transmission rollers are not in contact with each other, two of said three transmission rollers being fixed rollers each of which is supported rotatably around a shaft fixed to said fixed part in parallel to said two parallel shafts, the rest of said three transmission rollers being a wedge roller, said wedge roller being supported so that it can rotate while being parallel to axes of said fixed rollers and that it can move in the unequally-spaced space in a circumferential direction of the unequally-spaced, said wedge roller being drawn into a spatial position between said rolling-surface-shaft and said ring in such a direction that the unequally-spaced space becomes narrower by tangential forces generated by torque, which acts between said rolling-surface-shaft and said ring, at contact points between the transmission surface of said wedge roller and each of the rolling surfaces of said rolling-surface-shaft and said ring, normal forces being generated by a wedge effect of said wedge roller at the contact points, the normal forces causing normal forces even at contact points between each of the transmission surfaces of said fixed rollers and each of the rolling surfaces of said rolling-surface-shaft and said ring, to thereby transmit rotation between said rolling-surface-shaft and said ring without gross slip at the contact points, wherein said wedge roller is placed at the spatial position where the unequally-

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spaced space is wider than that in a direction perpendicular to a direction of an eccentricity of said rolling-surface-shaft and said ring.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Naito (2001-65653).

Naito illustrates in the Figures a rolling friction transmission apparatus of a wedge roller type comprising: two parallel shafts which are mutually eccentric and are rotatably supported by a fixed part (Fig 8); a rolling-surface-shaft which has a cylindrical rolling surface at an outer surface thereof and is disposed at one of said two parallel shafts; a ring which has a cylindrical rolling surface at an inner surface thereof and is disposed at the other of said two parallel shafts; and three transmission rollers which have cylindrical transmission surfaces at outer surfaces thereof respectively and are placed in contact with the rolling surfaces of said rolling-surface-shaft and said ring, in an unequally-spaced space generated between the rolling surfaces of said rolling-surface-shaft and said ring and with such a gap that said three transmission rollers are not in contact with each other, two of said three transmission rollers being fixed rollers each of which is supported rotatably around a shaft fixed to said fixed part in parallel to said two parallel shafts, the rest of said three transmission rollers being a wedge roller, said wedge roller being supported so that it can rotate while being parallel to axes of said fixed rollers and that it can move in the unequally-spaced space in a circumferential direction of the unequally-spaced, said wedge roller being drawn into a spatial position between said rolling-surface-shaft and said ring in such a direction that the unequally-

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spaced space becomes narrower by tangential forces generated by torque, which acts between said rolling-surface-shaft and said ring, at contact points between the transmission surface of said wedge roller and each of the rolling surfaces of said rolling-surface-shaft and said ring, normal forces being generated by a wedge effect of said wedge roller at the contact points, the normal forces causing normal forces even at contact points between each of the transmission surfaces of said fixed rollers and each of the rolling surfaces of said rolling-surface-shaft and said ring, to thereby transmit rotation between said rolling-surface-shaft and said ring without gross slip at the contact points, wherein said wedge roller is placed at the spatial position where the unequally-spaced space is wider than that in a direction perpendicular to a direction of an eccentricity of said rolling-surface-shaft and said ring.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the roller transmission of AI ('930), Nelson ('936), and Nelson et al. ('270).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 5/30/06
William C. Joyce